EPI Update for Friday January 13, 2006

Center for Acute Disease Epidemiology

Iowa Department of Public Health

Items for this week's EPI update

- New ACIP guidelines for the childhood immunization schedule
- Influenza update
- Avian influenza update spread to Europe
- Public health response to meningitis
- Petting zoos maximize the experience and minimize the risk for *E. coli* O157:H7

New ACIP guidelines for the childhood immunization schedule

The Advisory Committee on Immunization Practices (ACIP) has released their "Harmonized Childhood and Adolescent Immunization Schedule" for 2006. Points emphasized in the new schedule include:

- Emphasis on the importance of the initial hepatitis B vaccine dose at birth.
- Use of the new Tdap booster vaccinations for 11-12 year olds (contains the pertussis booster).
- Also for 11-12 year old patients, the new conjugated meningococcal vaccine (MCV4) vaccination is recommended. The vaccine is also recommended for use with college freshmen living in dormitories.
- Influenza vaccination for all children 6-23 months of age.

To view the MMWR article, go to www.cdc.gov/mmwr.

Influenza update

Seasonal Influenza: Iowa and the United States

Iowa is now experiencing regional levels of influenza activity. Overall cases of influenza are increasing but are rising as expected.

Only one case of type B influenza has been confirmed, so please continue to submit specimens to UHL for testing positive for the B strain, and when the patient has influenza-like illness symptoms and has a rapid test that is negative. Schools, child care and long term care facilities are experiencing increases in Influenza-like illness (ILI). We expect this trend will continue until the end of January or beginning of February.

For more information on the IISN or to view our activity map, visit our Web site at www.idph.state.ia.us/adper/flu.asp.

Avian influenza

Human cases in Turkey

Avian influenza cases in humans are now occurring in Turkey. Although Turkish health officials are reporting more than 15 cases, WHO has only lab confirmed 4 thus far.

Pandemic influenza planning efforts

Two new PowerPoint presentations are available for educating the general public as well as professionals in health care and public health. They are available on the Health Alert Network and on the IDPH Web site at www.idph.state.ia.us/adper/flu.asp. IDPH is encouraging you to download these important materials and use as appropriate.

Public health response to meningitis

The majority of bacteria that may cause meningitis or other invasive bacterial disease do not require a public health response. The reason for this is either because they are not easily transmitted person-to-person, or because they do not normally cause severe disease. This includes *Streptococcus pneumonia*, Group B *Streptococcus* and *Streptococcus viridans*.

Two bacteria, *Haemophilus influenzae* type b and *Neisseria meningitidis*, do require a public health response including immediate reporting, an assessment of contacts for risk of transmission and/or whether that risk is present. Both of these bacteria can be transmitted to others and cause secondary cases of meningitits. Thus prophylactic antibiotics are recommended for exposed persons.

The less common of these is *Haemophilus influenzae* type b. For this bacterium, prophylaxis is indicated to protect children less than 12 months old or a child of 1-3 years who is inadequately immunized. If this is the case, everyone around them, including household contacts of any age, should receive prophylaxis. This reduces nasopharyngeal carriage and reduces the risk of spread to the susceptible infant. *Haemophilus influenzae* that is not type b requires no public health response.

When two or more cases of invasive *Haemophilus influenzae* type b disease have occurred within 60 days of one another and the cases involve unimmunized or

incompletely immunized children attending a child care facility, administration of rifampin to all attendees and supervisory personnel is indicated.

The second bacterium requiring a public health response is *Neisseria meningitidis*. Chemoprophylaxis is indicated for persons who have had intimate contact (such as household members) or direct saliva contact with the patient in the week before onset or until 24 hours after the patient has begun an effective antibiotic. Post-exposure prophylaxis reduces nasopharyngeal carriage and decreases the risk of invasive disease for the person receiving the prophylaxis and decreases the spread of the organism to additional persons.

Petting zoos – maximize the experience and minimize the risk for E. coli O157:H7

Many folks recall the 1993 outbreak of gastrointestinal illness associated with eating undercooked hamburger from a "fast-food" restaurant chain. Since 1993, a great deal has been learned about *E. coli* O157:H7.

A number of past and recent outbreaks of *E. coli* O157:H7 illness in humans have been linked to animal contact at farms, animal exhibits and petting zoos. Two outbreaks occurred during 2000, and were associated with farm settings – one in Pennsylvania and one in Washington. Three outbreaks occurred during 2004 and 2005, and were associated with petting zoos at fair / festival settings – one in North Carolina, one in Florida and one in Arizona.

Replacing a 2001 CDC recommendation, a Morbidity and Mortality Weekly Report (MMWR) issue in March 2005 provides standard recommendations for petting zoos and animal exhibitors designed to minimize the risk for human illness or injury at venues where animal are present and contact with visitors is encouraged. The article is called "Compendium of Measures To Prevent Disease Associated with Animals in Public Settings, 2005," and is available at www.cdc.gov/mmwr/preview/mmwrhtml/rr5404a1.htm.

Here are just a few of the recommendations:

- Look for information and signs at the animal exhibit entrance and exit. Ideally, they should provide information about what types of animals are in the exhibit; the location of hand washing stations; "no food or drink allowed;" etc.
- Supervise children at all times. Hand-to-mouth contact (i.e. "thumb-sucking") should be strongly discouraged during and after a visit to an exhibit.
- Parents should consider the age and health status of their children children under 5 years of age can be at increased risk if infected with *E. coli* O157:H7 or other bacteria that may be present.

- Trained staff should be present in the exhibit or the area where the animals are kept.
- If feeding the animals is allowed, the exhibitor should provide the proper animal food and trained staff should supervise feeding of the animals.
- Use of hand washing stations should be promoted and encouraged by the exhibitor. Hand washing stations should have adequate soap and water, be located near the exit of the venue, and be designed for easy use and access by all ages of people.
- Areas for people to eat and drink should be entirely separate from the animal areas and be located an appropriate distance away from the venue.

Meeting announcements:

The Iowa Veterinary Medical Association is pleased to present Dr. Jean-Pierre Vaillancourt as a speaker during our Winter Conference.

Dr. Vaillancourt's presentation will take a look at recent epidemics of avian influenza and the role in regional disease control.

When: Wednesday, Feb. 8

Time: 10:30 a.m. – 12:00 p.m.

Location: The Hotel at Gateway Center, Elwood Drive & Hwy 30, Ames

Members of the medical community are invited to attend at no charge.

If you have any questions or would like additional information, please feel free to contact the IVMA at 515-965-9237, 1-800-369-9564, or ivma@netins.net mailto:ivma@netins.net>

Have a Healthy and Happy Week Center for Acute Disease Epidemiology Iowa Department of Public Health 1-800-362-2736